- (f) Each space adjacent to a hold containing material described in paragraph (a) of this section must be well ventilated with mechanical fans. No person may enter that space unless it has been tested to ensure that it is free from phosphine and arsine gases.
- (g) Scuttles and windows in accommodation and work spaces adjacent to holds containing material described in paragraph (a) of this section must be kept closed while this material is being loaded and unloaded.
- (h) Any bulkhead between a hold containing material described in paragraph (a) of this section and an accommodation or work space must be gas tight and adequately protected against damage from any unloading equipment.
- (i) When a hold containing material described in paragraph (a) of this section is equipped with atmosphere sampling type smoke detectors with lines that terminate in accommodation or work spaces, those lines must be blanked off gas-tight.
- (j) If a hold containing material described in paragraph (a) of this section must be entered at any time, the hatches must be open for two hours before entry to dissipate any accumulated gases. The atmosphere in the hold must be tested to ensure that there is no phosphine or arsine gas present.
- (k) After unloading material described in paragraph (a) of this section, each cargo hold must be thoroughly cleaned and tested to ensure that no phosphine or arsine gas remains.

## §148.260 Ferrous metal.

- (a) This part does not apply to the stowage and transportation in bulk of stainless steel borings, shavings, turnings, or cuttings; nor does this part apply to an unmanned barge on a voyage entirely on the navigable waters of United States.
- (b) Ferrous metal may not be stowed or transported in bulk unless the following conditions are met:
- (1) All wooden sweat battens, dunnage, and debris must be removed from the hold before the ferrous metal is loaded;
- (2) If weather is inclement during loading, hatches must be covered or

- otherwise protected to keep the material dry;
- (3) During loading and transporting, the bilge of each hold in which ferrous metal is stowed or will be stowed must be kept as dry as practical;
- (4) During loading, the ferrous metal must be compacted in the hold as frequently as practicable with a bulldozer or other means that provides equivalent surface compaction;
- (5) No other material may be loaded in a hold containing ferrous metal unless—
- (i) The material to be loaded in the same hold with the ferrous metal is not a material listed in Table 148.10 of this part or a readily combustible material;
- (ii) The loading of the ferrous metal is completed first; and
- (iii) The temperature of the ferrous metal in the hold is below 55  $^{\circ}$ C (131  $^{\circ}$ F) or has not increased in eight hours before the loading of the other material; and
- (6) During loading, the temperature of the ferrous metal in the pile being loaded must be below 55  $^{\circ}$ C (131  $^{\circ}$ F).
- (c) The master of a vessel that is loading or transporting a ferrous metal must ensure that the temperature of the ferrous metal is taken—
  - (1) Before loading;
- (2) During loading, in each hold and pile being loaded, at least once every twenty-four hours and, if the temperature is rising, as often as is necessary to ensure that the requirements of this section are met; and
- (3) After loading, in each hold, at least once every 24 hours.
- (d) During loading, if the temperature of the ferrous metal in a hold is 93 °C (200 °F) or higher, the master must notify the Coast Guard Captain of the Port and suspend loading until the Captain of the Port is satisfied that the temperature of the ferrous metal is 88 °C (190 °F) or less.
- (e) After loading ferrous metal-
- (1) If the temperature of the ferrous metal in each hold is 65 °C (150 °F) or above, the master must notify the Coast Guard Captain of the Port, and the vessel must remain in the port area until the Captain of the Port is satisfied that the temperature of ferrous metal has shown a downward trend below 65 °C (150 °F) for at least eight

## § 148.265

hours after completion of loading of the hold; or

- (2) If the temperature of the ferrous metal in each hold is less than 88 °C (190 °F) and has shown a downward trend for at least eight hours after the completion of loading, the master must notify the Coast Guard Captain of the Port, and the vessel must remain in the port area until the Captain of the Port confirms that the vessel is sailing directly to another port, no further than 12 hours sailing time, for the purpose of loading more ferrous metal in bulk or to completely off-load the ferrous metal.
- (f) Except for shipments of ferrous metal in bulk which leave the port of loading under the conditions specified in paragraph (e)(2) of this section, if after the vessel leaves the port, the temperature of the ferrous metal in the hold rises above 65 °C (150 °F), the master must notify the nearest Coast Guard Captain of the Port as soon as possible of—
- (1) The name, nationality, and position of the vessel;
- (2) The most recent temperature taken:
- (3) The length of time that the temperature has been above 65  $^{\circ}$ C (150  $^{\circ}$ F) and the rate of rise, if any;
- (4) The port where the ferrous metal was loaded and the destination of the ferrous metal;
- (5) The last port of call of the vessel and its next port of call;
  - (6) What action has been taken; and
- (7) Whether any other cargo is endangered.

## § 148.265 Fish meal or fish scrap.

- (a) This part does not apply to fish meal or fish scrap that contains less than 5 percent moisture by weight.
- (b) Fish meal or fish scrap may contain a maximum of 12 percent moisture by weight and a maximum of 15 percent fat by weight.
- (c) At the time of production, fish meal or fish scrap must be treated with an effective antioxidant (at least 400 mg/kg (ppm) ethoxyquin, at least 1000 mg/kg (ppm) butylated hydroxytoluene, or at least 1000 mg/kg (ppm) of tocopherol-based liquid antioxidant).
- (d) Shipment of the fish meal or fish scrap must take place a maximum of 12

months after the treatment prescribed in paragraph (c) of this section.

- (e) Fish meal or fish scrap must contain at least 100 mg/kg (ppm) of ethoxyquin or butylated hydroxytoluene or at least 250 mg/kg (ppm) of tocopherol-based antioxidant at the time of shipment.
- (f) At the time of loading, the temperature of the fish meal or fish scrap to be loaded may not exceed 35 °C (95 °F), or 5 °C (9 °F) above the ambient temperature, whichever is higher.
- (g) For each shipment of fish meal or fish scrap, the shipper must give the master a written certification stating—
- (1) The total weight of the shipment; (2) The moisture content of the material:
  - (3) The fat content of the material;
- (4) The type of antioxidant and its concentration in the fish meal or fish scrap at the time of shipment;
- (5) The date of production of the material: and
- (6) The temperature of the material at the time of shipment.
- (h) During a voyage, temperature readings must be taken of fish meal or fish scrap three times a day and recorded. If the temperature of the material exceeds 55 °C (131 °F) and continues to increase, ventilation to the hold must be restricted. This paragraph does not apply to shipments by unmanned barge.

## § 148.270 Hazardous substances.

- (a) Each bulk shipment of a hazardous substance must—
- (1) Be assigned a shipping name in accordance with 49 CFR 172.203(c); and
- (2) If the hazardous substance is also listed as a hazardous solid waste in 40 CFR part 261, follow the applicable requirements of 40 CFR chapter I, subchapter I
- (b) Each release of a quantity of a designated substance equal to or greater than the reportable quantity, as set out in Table 1 to Appendix A of 49 CFR 171.101, when discharged into or upon the navigable waters of the United States, adjoining shorelines, into or upon the contiguous zone, or beyond the contiguous zone, must be reported as required in subpart B of 33 CFR part 153